

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Nebraska Tractor Tests

Tractor Test and Power Museum, The Lester F. Larsen

---

1987

## Nebraska Summary: S041 Case-IH 9130

Nebraska Tractor Test Laboratory

University of Nebraska-Lincoln, [tractortestlab@unl.edu](mailto:tractortestlab@unl.edu)

Follow this and additional works at: <https://digitalcommons.unl.edu/tractormuseumlit>



Part of the [Energy Systems Commons](#), [History of Science, Technology, and Medicine Commons](#), [Other Mechanical Engineering Commons](#), [Physical Sciences and Mathematics Commons](#), [Science and Mathematics Education Commons](#), and the [United States History Commons](#)

---

Laboratory, Nebraska Tractor Test, "Nebraska Summary: S041 Case-IH 9130" (1987). *Nebraska Tractor Tests*. 2692.

<https://digitalcommons.unl.edu/tractormuseumlit/2692>

This Article is brought to you for free and open access by the Tractor Test and Power Museum, The Lester F. Larsen at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Tractor Tests by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

# SUMMARY OF OECD TEST 1126—NEBRASKA SUMMARY 041

## CASE INTERNATIONAL 9130 DIESEL ALSO STEIGER WILDCAT 1000 DIESEL

### 12 SPEED

#### POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Fuel Consumption			Mean Atmospheric Conditions
		Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed—(PTO speed—1001 rpm)					
191.2 (142.6)	2101	11.0 (41.7)	0.412 (0.251)	17.36 (3.42)	
Maximum Power (2 hour test)					
198.5 (148.1)	1800	11.0 (41.6)	0.396 (0.241)	18.07 (3.56)	Air temperature
VARYING POWER AND FUEL CONSUMPTION					
191.2 (142.6)	2101	11.0 (41.7)	0.412 (0.251)	17.36 (3.42)	81°F (27°C)
165.2 (123.3)	2136	10.0 (37.8)	0.432 (0.263)	16.57 (3.27)	Relative humidity
125.9 (94.0)	2171	8.2 (31.2)	0.469 (0.285)	15.27 (3.01)	21%
84.9 (63.4)	2196	6.4 (24.2)	0.538 (0.327)	13.31 (2.62)	Barometer
43.0 (32.0)	2221	4.6 (17.5)	0.769 (0.468)	9.31 (1.83)	29.60" Hg (100.0 kPa)
1.0 (0.8)	2250	2.9 (11.1)	..... (.....)	0.37 (0.07)	

Maximum Torque 645.9 lb. ft (875.7 Nm) @ 1400 RPM  
Maximum Torque Rise 35%

#### DRAWBAR PERFORMANCE

Power Hp (kW)	Drawbar pull (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp.°F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
<b>75% of Pull at Maximum Power—Five Hours 7th Gear</b>									
153.12 (114.23)	8680 (38.61)	6.62 (10.65)	2132	2.46	0.473 (0.288)	15.33 (3.02)	187 (86)	86 (31)	30.08 (101.6)
<b>MAXIMUM POWER IN SELECTED GEARS</b>									
<b>3rd Gear</b>									
157.76 (117.69)	26170 (116.42)	2.26 (3.64)	1800	14.99	0.487 (0.296)	14.92 (2.94)	185 (85)	77 (25)	30.09 (101.6)
<b>4th Gear</b>									
170.03 (126.84)	20780 (92.45)	3.07 (4.94)	1854	8.52	0.464 (0.282)	15.64 (3.08)	185 (85)	77 (25)	30.09 (101.6)
<b>5th Gear</b>									
172.02 (128.33)	17260 (76.77)	3.74 (6.02)	1842	6.49	0.452 (0.275)	16.04 (3.16)	187 (86)	79 (26)	30.09 (101.6)
<b>6th Gear</b>									
173.29 (129.28)	13970 (62.12)	4.66 (7.49)	1830	4.79	0.445 (0.270)	16.34 (3.22)	187 (86)	79 (26)	30.09 (101.6)
<b>7th Gear</b>									
175.47 (130.90)	11610 (51.66)	5.67 (9.12)	1851	3.76	0.448 (0.273)	16.16 (3.18)	189 (86)	81 (27)	30.09 (101.6)
<b>8th Gear</b>									
174.56 (130.22)	10160 (45.18)	6.45 (10.38)	1744	2.99	0.442 (0.269)	16.40 (3.23)	187 (87)	81 (27)	30.09 (101.6)
<b>9th Gear</b>									
172.02 (128.32)	7740 (34.43)	8.34 (13.42)	1815	2.19	0.445 (0.270)	16.35 (3.22)	187 (86)	81 (27)	30.09 (101.6)

**Location of Test:** J.I. Case Company, 3101 1st Avenue North, Fargo, North Dakota 58102

**Dates of Test:** March to July, 1987

**Manufacturer:** J.I. Case Company, 700 State Street, Racine, Wisconsin 53404 U.S.A.

**FUEL AND OIL:** Fuel No. 2 Diesel Cetane No. 40 min Specific gravity converted to 60°/60°F (15°/15°C) 0.859 Fuel weight 7.15 lbs/gal (0.857 kg/l) Oil SAE 15W40 Oil Consumption for 10 hours 2.10 lb (940 gm) Transmission lubricant Case IH transmission oil 02-7408T1 Final drive lubricant SAE 80W-90 gear oil API GL-5

**ENGINE:** Make Consolidated Diesel Company Diesel Type six cylinder vertical with turbocharger and intercooler Serial No. 44191986 Crankshaft lengthwise Rated engine speed 2100 Bore and stroke 4.49" × 5.32" (114 mm × 135 mm) Compression ratio 16.5 to 1 Displacement 504.5 cu in (8269 ml) Starting system 12 volt Lubrication pressure Air cleaner two paper elements and aspirator Oil filter one full flow cartridge Oil cooler engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil Fuel filter two paper cartridges Muffler none Exhaust vertical Cooling medium temperature control two thermostats.

**CHASSIS:** Type four wheel drive Serial No. 17900757 Tread width rear 60" (1524 mm) to 130" (3302 mm) front 60" (1524 mm) to 130" (3302 mm) Wheel base 120.4" (3058 mm) Hydraulic control system direct engine drive Transmission selective gear fixed ratio with full range operator controlled powershift Nominal travel speeds mph (km/h) first 2.0 (3.3) second 2.5 (3.9) third 3.0 (4.9) fourth 3.7 (5.9) fifth 4.4 (7.1) sixth 5.5 (8.8) seventh 6.5 (10.5) eighth 7.8 (12.5) ninth 9.6 (15.4) tenth 11.7 (18.9) eleventh 14.1 (22.7) twelfth 17.3 (27.9) reverse 2.7 (4.3), 4.8 (7.8) Clutch multiple wet disc hydraulically power actuated by foot pedal Brakes caliper disc hydraulically actuated by foot pedal Steering hydrostatic and articulated Power take-off 1000 rpm at 2099 engine rpm Unladen tractor mass 21080 lb (9560 kg).

**REPAIRS AND ADJUSTMENTS:** No repairs or adjustments.

TRACTOR SOUND LEVEL WITH CAB		dB(A)
Maximum sound level		79.0
Bystander in 12th gear		94.5

#### CENTER OF GRAVITY

Horizontal distance forward from centerline of rear wheels	63.2" in (1605 mm)
Vertical distance above roadway	47.3" in (1202 mm)
Horizontal distance from center of rear wheel tread 0" to the right/left	

#### TURNING ON A CONCRETE SURFACE

Turning radius—with singles right 208" (5.29 m) left 203" (5.15 m)	
—with duals right 239" (6.07 m) left 234" (5.95 m)	
Turning space radius—with singles right 238" (6.05 m) left 233" (5.91 m)	
—with duals right 250" (6.36 m) left 245" (6.23 m)	

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
Rear Tires	—No., size, ply & psi (kPa)	Four 18.4-38; 8; inner	Two 18.4-38; 8; 18 (124)
	Ballast	14 (96) outer 12 (82)	
	—Duals (total)	520 lb (235 kg)	None
Front Tires	—No., size, ply & psi (kPa)	Four 18.4-38; 8; inner	Two 18.4-38; 8; 18 (124)
	Ballast	14 (96) outer 12 (82)	
	—Liquid (total)	3565 lb (1620 kg)	None
	—Duals (total)	520 lb (235 kg)	
Height of Drawbar		14.4 in (365 mm)	13.7 in (349 mm)
Static Weight	—Rear	10740 lb (4870 kg)	10220 lb (4635 kg)
	—Front	14945 lb (6780 kg)	10860 lb (4925 kg)
	—Total	25685 lb (11650 kg)	21080 lb (9560 kg)

#### THREE POINT HITCH PERFORMANCE (STATIC TEST)

CATEGORY: III

Quick Attach: None

Maximum Force Exerted Through Whole Range: 11230 lbs (50.0 kN)

i) Opening pressure of relief valve: NA

Sustained pressure at the compensator cutoff: 2540 psi (175 Bar)

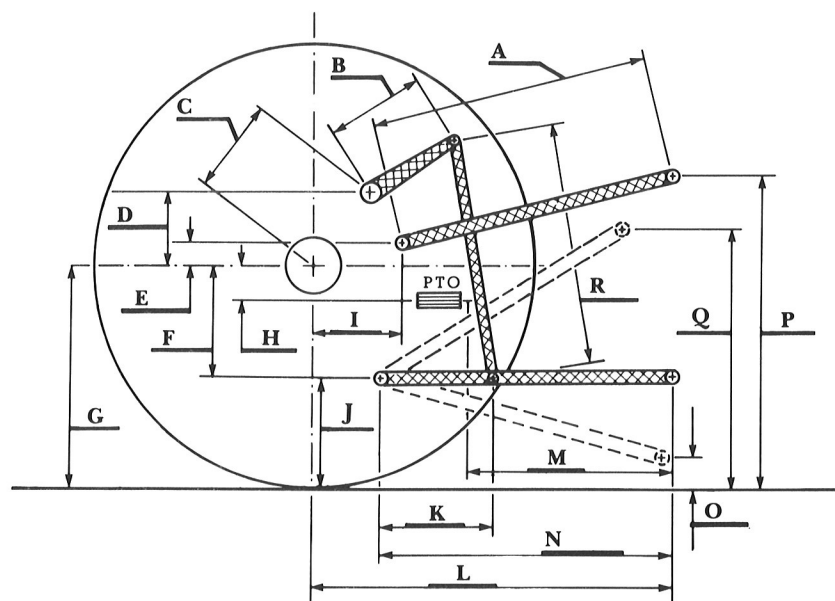
ii) Pump delivery rate at minimum pressure and rated engine speed: 28.3 GPM (107.1 l/min)

iii) Pump delivery rate at maximum hydraulic power: 25.0 GPM (94.6 l/min)

Delivery pressure: 2030 psi (140 Bar)

Power: 29.6 Hp (22.1 kW)

#### HITCH DIMENSIONS AS TESTED—NO LOAD



**REMARKS:** All test results were determined from observed data obtained in accordance with official OECD test procedures. The Case International 9130 is identical to the Steiger Wildcat 1000 except with regard to color and model designation.

The performance figures on this summary were taken from a test conducted under the OECD standard test code procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. 1126, Nebraska Summary 041, May 19, 1988.

LOUIS I. LEVITICUS

Engineer-in-Charge

K. VON BARGEN

R. D. GRISSE

J. R. GILLEY

Board of Tractor Test Engineers

	inch	mm
A	30.0	762
B	21.0	533
C	25.7	654
D	25.1	638
E	7.4	187
F	9.9	251
G	32.3	820
H	2.5	63
I	22.3	566
J	22.4	569
K	23.0	584
L	52.7	1338
M	25.7	652
N	42.0	1067
O	8.5	216
P	44.4	1129
Q	40.7	1033
R	35.5	902